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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/001,644 | 11/29/2001 | Li-Wen Chen | 52719.00033 | 5491 |

23910 7590 11/16/2006

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| EXAMINER |
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COLBERT, ELLA

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| ART UNIT | PAPER NUMBER |
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3694

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/001,644

Applicant(s)

CHEN ET AL.

Examiner

Ella Colbert

Art Unit

3694

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-103 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 35-103 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 35-103 are pending in the communication filed 08/31/06 entered as Response After Non-Final Action (Non-responsive Amendment).
2. After a through review and search of the amended claims the following has been determined there are multiple inventions as set forth here below.

Election/Restrictions

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 1. Claims 35-40, drawn to a method for forming a virtual schema based upon a reverse star schema, classified in class 707, subclass 2.
 2. Claims 41-49 and 52, drawn to a data warehouse builder apparatus for mapping rules and analysis functions, classified in class 707, subclass 102.
 3. Claims 50 and 51, drawn to a system for defining a data warehouse, classified in class 705, subclass 1.
 4. Claims 53-71 and 103, drawn to storing data according to a data model and a focal group with core components, classified in class 707, subclass 104.1.
 5. Claims 72-78, drawn to a method for creating a customer centric data warehouse, classified in class 705, subclass 10.
 6. Claims 79-91, drawn to a computer-implemented method for selecting customer entities, creating a database and data movement mapping rules, classified in class 707, subclass 201.

7. Claims 92-96, drawn to a computer-implemented method with a user interface for highlighting a first component of a reverse star schema, classified in class 345, subclass 475.
8. Claims 97 and 98, drawn to a computer-based computer product with code for accessing meta data, translating information entities, providing customer activity correlation queries, providing customer analysis and results, classified in class 707, subclass 3.
9. Claims 99-102, drawn to a computer-based program product for generating customer data analysis function code, scheduling tasks for managing a data warehouse, pre-processing data, performing data source analysis, and planning operations, classified in class 707, subclass 10.

Inventions 1 and 2 are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case Invention 1, claims 35-40 receives the first schema database, forms a virtual schema, and performs data analysis and Invention 2, claims 41-49 and 52 build the data warehouse using a data warehouse builder apparatus. Invention 1 does not require the particulars of Invention 2 because Invention 1 can be practiced alone or in other environments and Invention 2 can be practiced alone or in another schema building environment requiring mapping rules.

Inventions 3 and 4 are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because Invention 3, claims 50 and 51 has a system with a data warehouse, and customer data analysis applications. The subcombination Invention 4, claims 53-71 and 103 has separate utility such as a data model, a focal group, a plurality of core components, a plurality of classification components, a customized group, customer activity components, activity lookup components, and a reverse star schema meta model which Invention 3 does not have in the claim limitations of independent claim 50.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Inventions 5 and 6 are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case Invention 5, claims 72-78 creates a customer centric data warehouse and Invention 6, claims 79-91 can use the created customer centric data warehouse for selecting customer entities and for applying data movement mapping rules.

Inventions 7, 8, and 9 are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because Invention 7, claims 92-96 has providing a hierarchical display of functional components, highlighting a first component, and receiving an indication of information to be incorporated into the component to be defined. The subcombination Invention 8, claims 97 and 98 has separate utility such as code for accessing meta data from a repository, translating information entities, providing customer activity correlation queries and customer data analysis functions, and analysis results which Invention 7 does not include and Invention 9, claims 99-102 also has code for generating customer data analysis function code, scheduling tasks, pre-processing data, managing creation of the data warehouse,

defining customer data analysis functions, performing source code analysis, and planning operations. Invention 9 has code for performing different functions from Invention 8. These inventions can be practiced in different environments besides data warehousing.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

None of the claims in the restricted groups would result in double patenting if filed in divisional or other application.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Conclusion

Comments regarding restriction.

The Applicants' representative is respectfully requested to contact the Examiner of record after filing an official election of claims because it has been determined the claims in any group elected has 35 USC 112 second paragraph issues not found prior to this communication and after claim amendments. The claims have been given a thorough examination to arrive at the restriction and the outstanding issues.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 571-272-6741. The examiner can normally be reached on Monday, Tuesday, and Thursday, 5:30AM-3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 9, 2006


ELLA COLBERT
PRIMARY EXAMINER